

20-8716



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

SCRAP

D2571
Job Sheet 213867



Part No: D2571

Job Qty: 12 pcs

Part Name: Saddle, Fwd, Out



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/8/20

Job Tracking No:

Due Date: 11/4/20

Created By: Jennifer Renwick

Type: Stock

Description: SIOP

Note: DWG REV F IPP: I 02.10.02 Re-format; Change to Dwg Rev. D & incorporated D2572 KJ

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Lead Time	Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier			
90	Machining - Issue SN	12 pcs			0.00	0.00	HAAS - 1		DAS 52 9-89	20/10/20
							HAAS - 2			
							HAAS - 3			
							HAAS - 4			
100	HAAS 4 Axis - B4B	12 pcs			1.00	19.35	HAAS - 1 - B4B		DAS 52 9-89	20/10/24
							HAAS - 2 - B4B			
							HAAS - 3 - B4B			
							HAAS - 4 - B4B			
110	Conventional Mill - 1 - B4B	12 pcs			0.00	1.85	Conventional Mill - 1 - B4B		DAS 52 9-89	20/10/24
							Conventional Mill - 2 - B4B			
120	QC 2	12 pcs			0.00	0.00	QC 2 - 1			
							QC 2 - 12			
							QC 2 - 14			
							QC 2 - 17			
							QC 2 - 19			
							QC 2 - 2			
							QC 2 - 20			
							QC 2 - 22			
							QC 2 - 23			
							QC 2 - 25			
							QC 2 - 32			
							QC 2 - 33			
							QC 2 - 35			
							QC 2 - 39			
							QC 2 - 4			
							QC 2 - 40			
							QC 2 - 44			
							QC 2 - 45			
							QC 2 - 48			
							QC 2 - 49			



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S307240



Part: D2571

Job No: 213867

Serial No/Batch: S307240

Location:

Part No:

Part Name:

Production Date: 10/8/20

Rev: 10/8/20

Plex 10/8/20 10:15 AM Dart.Renwick.Jennifer

P.T.O.

10/8/20

[Dart Hawkesbury] Job Sheet - Renwick, Jennifer

			QC 2 - 50	
			QC 2 - 51	DAS
			QC 2 - 52	52
			QC 2 - 57	9-89 20/10/24
			QC 2 - 62	
			QC 2 - 63	
			QC 2 - 8	
			QC 2 - 66	
			QC 2 - 64	
			QC 2 - 65	
			QC 2 - 5	
			QC 2 - 71	
			QC 2 - 73	
			QC 2 - 69	
			QC 2 - 76	
			QC 2 - 86	
			QC 2 - 83	
130 QC 8	12 pcs	0.00 0.00	QC 8 - 12	
			QC 8 - 14	20/10/24
			QC 8 - 17	
			QC 8 - 20	
			QC 8 - 25	
			QC 8 - 3	
			QC 8 - 32	
			QC 8 - 33	
			QC 8 - 35	
			QC 8 - 39	
			QC 8 - 4	
			QC 8 - 44	
			QC 8 - 45	
			QC 8 - 49	
			QC 8 - 58	
			QC 8 - 8	
			QC 8 - 9	
			QC 8 - 68	
			QC 8 - 67	
			QC 8 - 1 (A)	
			QC 8 - 47	
			QC 8 - 40	
			QC 8 - 52	
			QC 8 - 23	
			QC 8 - 57	
			QC 8 - 76	
			QC 8 - 61	
			QC 8 - 66	
			QC 8 - 73	
			QC 8 - 82	
140 Handfinish - 1-1 Chemical-B4B	12 pcs	0.00 1.50	Handfinish - 1 - 1 - B4B	
			Handfinish - 1 - 2 - B4B	
			Handfinish - 1 - 3 - B4B	
			Handfinish - 1 - 4 - B4B	
			Handfinish - 1 - 5 - B4B	
			Handfinish - 1 - 6 - B4B	
			Handfinish - 1 - 7 - B4B	
			Handfinish - 1 - 8 - B4B	
			Handfinish - 1 - 9 - B4B	
			Handfinish - 1 - 10 - B4B	
			Handfinish - 1 - 11 - B4B	
			Handfinish - 1 - 12 - B4B	

Plex 10/8/20 10:15 AM Dart.Renwick.Jennifer

Plex 10/8/20 10:15 AM Dart.Renwick.Jennife

				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
				Packaging 3 - 37 - B4B	
	180 QC 21 - SA	12 pcs	0.00 0.00	QC 21 - SA - 21	DAS
				QC 21 - SA - 70	21
				QC 21 - SA - 9	9-09
				QC 21 - SA - 77	NOV 04 2020
				QC 21 - SA - 28	

Part Op 100 - (HAAS CNC vertical machine #1) Program Batch No. 530542 Double check by: J.R. 1-Machine Step No 1
 Descriptions: per Folio FA051 and inspect per attached Dimension Sheets 2-Machine Step No 2 per Folio FA051 and inspect per
 attached Dimension Sheets 3-Machine Step No 3 per Folio FA051 and inspect
 110 - (Manufacture as per dwg) Machine keyway as per dwg D2571 & D2572
 120 - (QC2- Inspect parts off machine FAI/FAIB) Inspect on CMM as per folio CMMA022.
 130 - (QC8- Inspect parts - second check)
 140 - (Chemical Conversion Coat per QSI005 4.1)
 150 - (White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum) START TIME: _____ FINISH TIME: _____
 160 - (QC3- Inspect Part Finish)
 170 - (Identify as per dwg & Stock Location: _____)
 180 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D6101-007	Saddle Billet	12 pcs (1 ea)	90-Machining - Issue SN	<u>530579 K12</u>

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Machining - Issue SN	D6101-007	12	5	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Saddle, Fwd Outboard	0.438Inches + 0.005 - 0.000	0.443 0.438		
2	Saddle, Fwd Outboard	1.745Inches + 0.010 - 0.000	1.755 1.745		
3	Saddle, Fwd Outboard	3.495Inches + 0.010 - 0.000	3.505 3.495		
4	Saddle, Fwd Outboard	1.745Inches + 0.010 - 0.000	1.755 1.745		
5	Saddle, Fwd Outboard	7.990Inches + 0.020	8.010		

			- 0.000	7.990
6	Saddle, Fwd Outboard	0.490Inches	+ 0.020 - 0.000	0.510 0.490
7	Saddle, Fwd Outboard	0.257Inches	+ 0.005 - 0.000	0.262 0.257
8	Saddle, Fwd Outboard	0.375Inches	+ 0.005 - 0.000	0.380 0.375
9	Saddle, Fwd Outboard	0.490Inches	+ 0.020 - 0.000	0.510 0.490
10	Saddle, Fwd Outboard	1.174Inches	+ 0.010 - 0.000	1.184 1.174
11	Saddle, Fwd Outboard	0.558Inches	+ 0.020 - 0.000	0.578 0.558
12	Saddle, Fwd Outboard	1.174Inches	+ 0.010 - 0.000	1.184 1.174
13	Saddle, Fwd Outboard	1.490Inches	+ 0.010 - 0.000	1.500 1.490
14	Saddle, Fwd Outboard	2.495Inches	+ 0.010 - 0.000	2.505 2.495
15	Saddle, Fwd Outboard	3.869Inches	+ 0.010 - 0.000	3.879 3.869
16	Saddle, Fwd Outboard	0.115Inches	+ 0.020 - 0.000	0.135 0.115
17	Saddle, Fwd Outboard	0.115Inches	+ 0.020 - 0.000	0.135 0.115
18	Saddle, Fwd Outboard	0.240Inches	+ 0.020 - 0.000	0.260 0.240
19	Saddle, Fwd Outboard	0.115Inches	+ 0.020 - 0.000	0.135 0.115
20	Saddle, Fwd Outboard	0.178Inches	+ 0.020 - 0.000	0.198 0.178
21	Saddle, Fwd Outboard	2.940Inches	+ 0.040 - 0.000	2.980 2.940
22	Saddle, Fwd Outboard	0.230Inches	+ 0.020 - 0.000	0.250 0.230
23	Saddle, Fwd Outboard	0.115Inches	+ 0.020 - 0.000	0.135 0.115
24	Saddle, Fwd Outboard	0.308Inches	+ 0.005 - 0.000	0.313 0.308
25	Saddle, Fwd Outboard	0.760Inches	+ 0.005 - 0.000	0.765 0.760
26	Saddle, Fwd Outboard	0.352Inches	+ 0.020 - 0.000	0.372 0.352
27	Saddle, Fwd Outboard	0.470Inches	+ 0.060 - 0.000	0.530 0.470
28	Saddle, Fwd Outboard	0.615Inches	+ 0.020 - 0.000	0.635 0.615
29	Saddle, Fwd Outboard	0.053Inches	+ 0.020 - 0.000	0.073 0.053
30	Saddle, Fwd Outboard	0.240Inches	+ 0.020 - 0.000	0.260 0.240
31	Saddle, Fwd Outboard	1.375Inches	+ 0.020 - 0.000	1.395 1.375
32	Saddle, Fwd Outboard	0.115Inches	+ 0.020 - 0.000	0.135 0.115
33	Saddle, Fwd Outboard	0.240Inches	+ 0.040 - 0.000	0.280 0.240
34	Saddle, Fwd Outboard	0.240Inches	+ 0.020 - 0.000	0.260 0.240
35	Saddle, Fwd Outboard	2.000Inches	+ 0.020 - 0.000	2.020 2.000
36	Saddle, Fwd Outboard	0.023Inches	+ 0.020 - 0.000	0.043 0.023

Plex 10/8/20 10:15 AM Dart.Renwick.Jennifer

DART AEROSPACE LTD	Work Order: 253867
Description: Saddle, Fwd Outboard	Part Number: D2571
Inspection Dwg: D2571 Rev. F	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		0.438	0.438	0.438	0.438		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.749	1.750	1.750	1.750		
E	7.990	8.010		8.003	8.003	8.003	8.003		
F	0.490	0.510		0.502	0.500	0.502	0.501		
G	0.257	0.262		0.258	0.258	0.258	0.258		
H	0.375	0.380		0.378	0.378	0.378	0.378		
I	0.490	0.510		0.501	0.500	0.500	0.500		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		0.567	0.567	0.567	0.567		
L	1.174	1.184		1.179	1.179	1.179	1.178		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		0.130	0.130	0.130	0.130		
Q	0.115	0.135		0.128	0.127	0.127	0.127		
R	0.240	0.260		0.253	0.251	0.252	0.252		
S	0.115	0.135		0.132	0.134	0.134	0.134		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		0.245	0.246	0.243	0.240		
W	0.115	0.135		0.124	0.133	0.125	0.124		
X	0.308	0.313		0.312	0.310	0.310	0.3125		
Y	0.760	0.765		0.762	0.762	0.762	0.762		
Z	0.352	0.372		0.370	0.366	0.364	0.364		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.626	0.625	0.626	0.626		
AC	0.053	0.073		0.060	0.060	0.060	0.060		
AD	0.240	0.260		0.255	0.256	0.253	0.250		
AE	1.375	1.395		1.385	1.385	1.385	1.385		
AF	0.115	0.135		0.130	0.130	0.130	0.130		
AG	0.240	0.280		0.250	0.250	0.250	0.250		
AH	0.240	0.260		0.255	0.259	0.250	0.250		
AI	2.000	2.020		2.000	2.000	2.000	2.000		
AJ	0.023	0.043		0.033	0.033	0.033	0.033		
Accept/Reject									

Measured by: DTP	Audited by: [Signature]
Date: 20-10-22/52/10/21	Date: 20/10/24

Rev	Date	Change	Revised by	Approved
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	
F	13.03.07	Dwg Rev updated	KJ	

DART AEROSPACE LTD		Work Order: 213567
Description: Saddle, Fwd Outboard		Part Number: D2571
Inspection Dwg: D2571 Rev. F		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	5	6	7	8	By	Date
A	0.438	0.443		0.438	0.438	0.438	0.438		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.004	8.004	8.004	8.004		
F	0.490	0.510		0.503	0.503	0.503	0.503		
G	0.257	0.262		0.258	0.258	0.258	0.258		
H	0.375	0.380		0.378	0.375	0.378	0.378		
I	0.490	0.510		0.501	0.502	0.5015	0.503		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		0.568	0.568	0.5685	0.570		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.873	3.873	3.874	3.874		
P	0.115	0.135		0.130	0.130	0.130	0.128		
Q	0.115	0.135		0.127	0.127	0.127	0.126		
R	0.240	0.260		0.252	0.252	0.252	0.252		
S	0.115	0.135		0.132	0.132	0.132	0.131		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		0.240	0.240	0.240	0.240		
W	0.115	0.135		0.126	0.125	0.125	0.123		
X	0.308	0.313		0.313	0.312	0.311	0.311		
Y	0.760	0.765		0.762	0.762	0.762	0.762		
Z	0.352	0.372		0.363	0.362	0.363	0.364		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.626	0.626	0.626	0.626		
AC	0.053	0.073		0.058	0.058	0.058	0.058		
AD	0.240	0.260		0.248	0.249	0.249	0.248		
AE	1.375	1.395		1.385	1.385	1.385	1.385		
AF	0.115	0.135		0.125	0.130	0.130	0.128		
AG	0.240	0.280		0.250	0.250	0.250	0.250		
AH	0.240	0.260		0.253	0.253	0.253	0.253		
AI	2.000	2.020		2.000	2.000	2.000	2.000		
AJ	0.023	0.043		0.033	0.033	0.033	0.033		
Accept/Reject				DAS					

Measured by: DTP	52
Date: 20-10-22/2020/24	

Audited by: [Signature]
Date: 20/10/24

Rev	Date	Change	Revised by	Approved
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	
F	13.03.07	Dwg Rev updated	KJ	

DART AEROSPACE LTD	Work Order:	213867
Description: Saddle, Fwd Outboard	Part Number:	D2571
Inspection Dwg: D2571 Rev. F		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

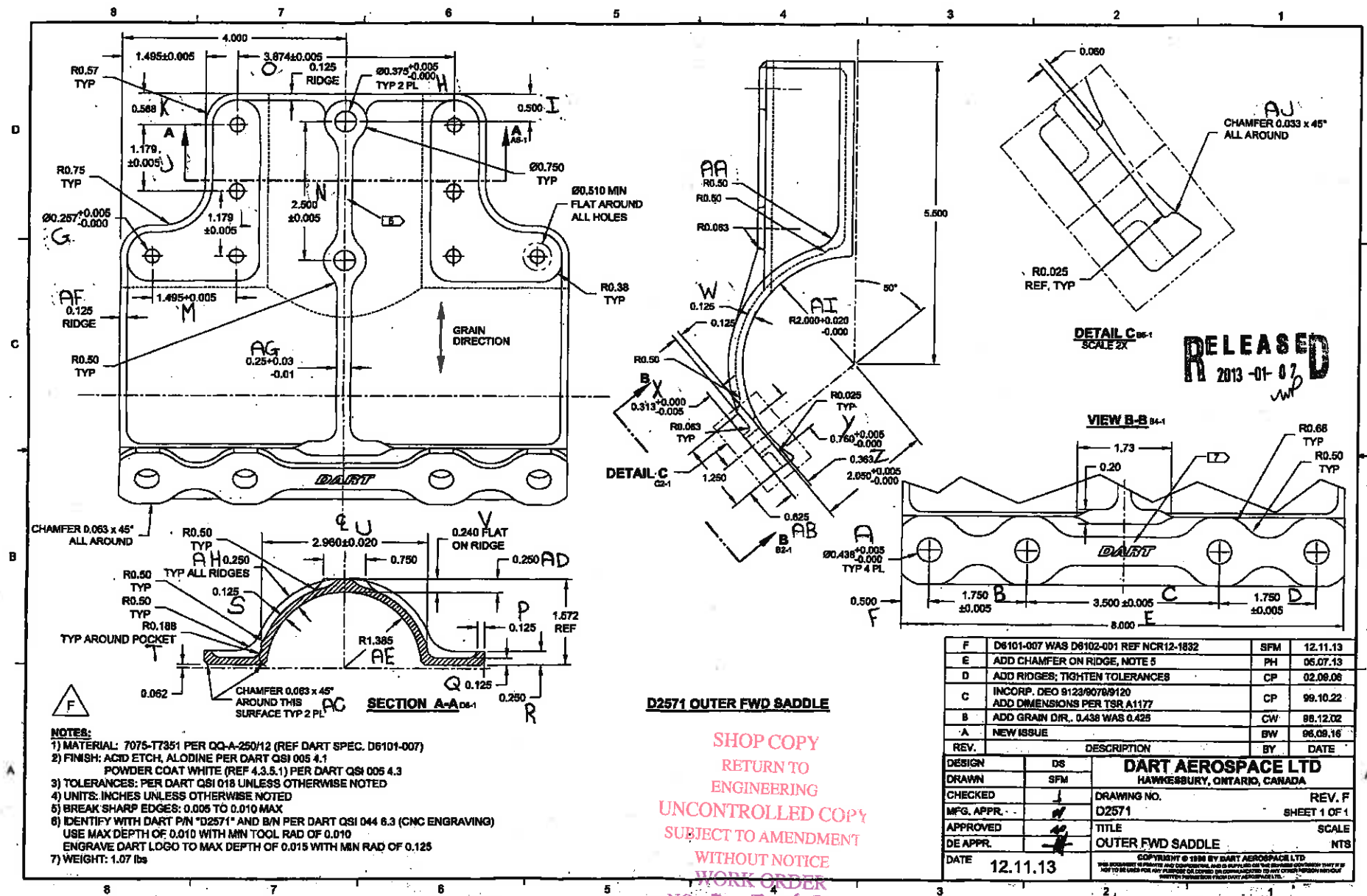
Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				9	10	11	12		
A	0.438	0.443		0.438	0.438	0.438	0.438		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.003	8.003	8.003	8.003		
F	0.490	0.510		0.502	0.501	0.501	0.501		
G	0.257	0.262		0.258	0.258	0.258	0.258		
H	0.375	0.380		0.378	0.378	0.378	0.378		
I	0.490	0.510		0.503	0.503	0.499	0.503		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		0.570	0.568	0.567	0.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		0.128	0.128	0.128	0.128		
Q	0.115	0.135		0.126	0.126	0.127	0.126		
R	0.240	0.260		0.252	0.252	0.252	0.252		
S	0.115	0.135		0.131	0.132	0.132	0.130		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		0.240	0.247	0.240	0.239		
W	0.115	0.135		0.123	0.125	0.123	0.123		
X	0.308	0.313		0.311	0.311	0.311	0.311		
Y	0.760	0.765		0.762	0.762	0.762	0.762		
Z	0.352	0.372		0.365	0.365	0.365	0.365		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.626	0.626	0.626	0.626		
AC	0.053	0.073		0.058	0.058	0.058	0.058		
AD	0.240	0.260		0.249	0.250	0.250	0.248		
AE	1.375	1.395		1.385	1.385	1.385	1.385		
AF	0.115	0.135		0.128	0.128	0.128	0.128		
AG	0.240	0.280		0.250	0.250	0.250	0.250		
AH	0.240	0.260		0.253	0.251	0.254	0.250		
AI	2.000	2.020		2.000	2.000	2.000	2.000		
AJ	0.023	0.043		0.033	0.033	0.033	0.033		

Accept/Reject DAS

Measured by:	DJP
Date:	20-10-22

Audited by:	mf
Date:	20/10/24

Rev	Date	Change	Revised by	Approved
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	
F	13.03.07	Dwg Rev updated	KJ	



Entered: 18Date: DEC 01 2020

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. 20-8716Route update only ☐

Job: <u>213867</u> Part No. <u>D 2571</u>	DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☒ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date: <u>20/10/21</u>	Sequence #: <u>100</u>	QTY Affected: <u>1</u>		MRB (QSI042) DAS 9 9-89 <u>20-10-21</u>	
Description Work Order Deviation		Disposition		Completed By	
operator took origin in wrong spot		Scrap & destroy no repley replace.		5C <u>20/10/21</u>	
				Lead hand / Supervisor <u>20/10/21</u>	
				QC / QA Coordinator DAS 9 9-89 <u>20-10-21</u>	
Root Cause Operator ☒ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☒ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☒ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					